



## Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Texas

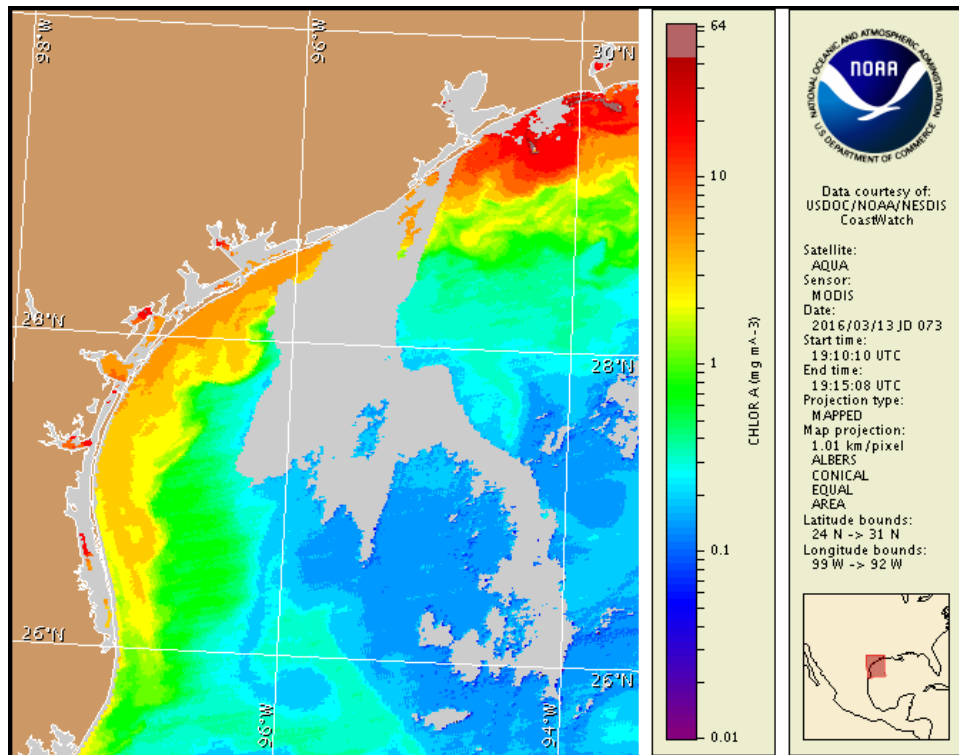
Monday, 14 March 2016

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, March 7, 2016



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from March 4 to 9: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Texas Parks and Wildlife Department. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

[http://tidesandcurrents.noaa.gov/hab/hab\\_publication/habfs\\_bulletin\\_guide.pdf](http://tidesandcurrents.noaa.gov/hab/hab_publication/habfs_bulletin_guide.pdf)

Detailed sample information can be obtained through the Texas Parks and Wildlife Department at:

<http://www.tpwd.state.tx.us/landwater/water/enviroconcerns/hab/redtide/status.phtml>

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit the NOAA Harmful Algal Bloom Operational Forecast System bulletin archive:

<http://tidesandcurrents.noaa.gov/hab/bulletins.html>

## Conditions Report

*Karenia brevis* (commonly known as Texas red tide) ranges from not present to background concentrations along the coast of Texas. No respiratory irritation is expected Monday, March 14 through Monday, March 21.

Check [http://tidesandcurrents.noaa.gov/hab/beach\\_conditions.html](http://tidesandcurrents.noaa.gov/hab/beach_conditions.html) for recent, local observations.

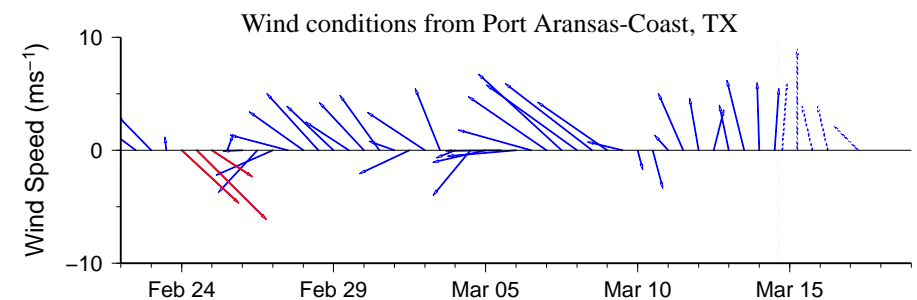
## Analysis

Sampling from the Texas A&M University's Imaging FlowCytobot, located on the Port Aransas ship channel, indicates that *Karenia brevis* ranges between 'not present' and 'background' concentrations (TAMU; 3/7-14). For information on area shellfish restrictions, contact the Texas Department of State Health Services.

Recent MODIS Aqua imagery (3/13, shown left) is partially obscured by clouds from the Galveston Island to East Matagorda Bay regions, limiting analysis. Elevated to very high chlorophyll (2 to >20  $\mu\text{g/L}$ ) is visible along- and offshore the coast of Texas from Sabine Pass to south of the Rio Grande. Elevated chlorophyll is not indicative of the presence of *K. brevis* and is most likely due to the resuspension of benthic chlorophyll and sediments along the coast.

Forecast models based on predicted near-surface currents indicate a potential maximum transport of 70 km north from the Port Aransas region from March 13-17.

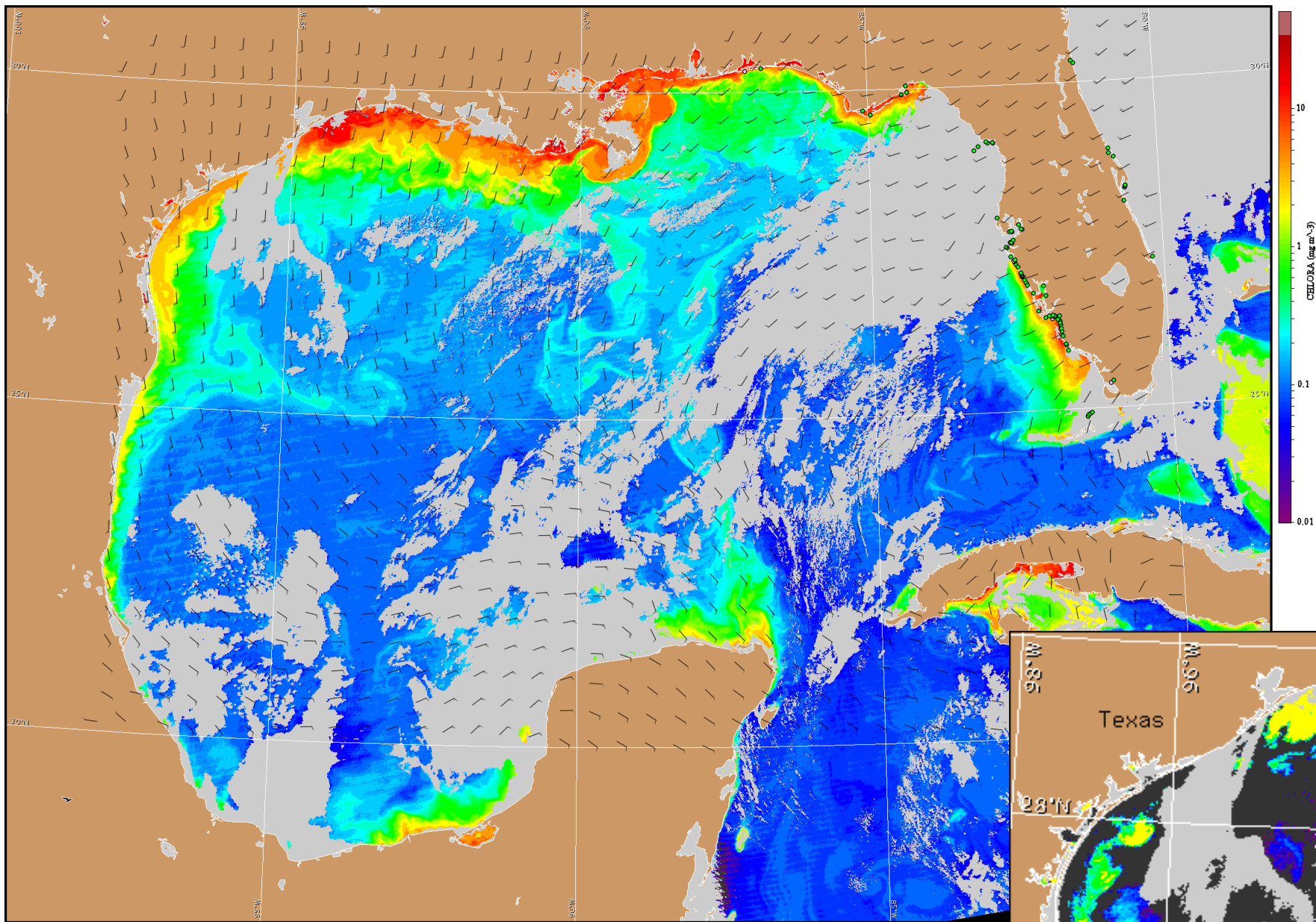
Kavanaugh, Davis



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).

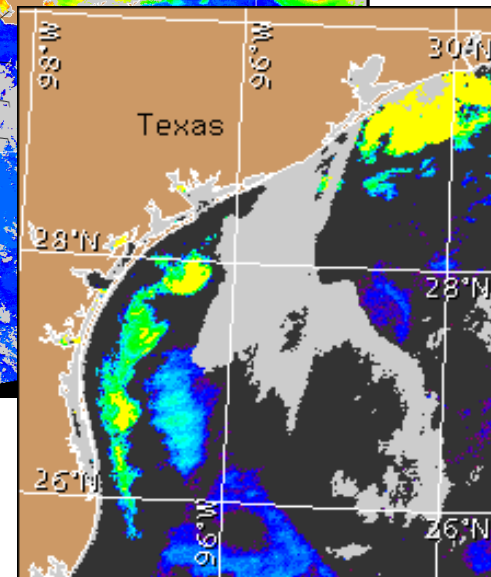
## Wind Analysis

**Port Aransas to Matagorda Ship Channel:** South winds (10-20kn, 5-10m/s) today through Tuesday becoming southeast winds (5-15kn, 3-8m/s) Tuesday night through Thursday night. East to northeast winds (10-15kn, 5-8m/s) Friday through Friday night.



Satellite chlorophyll image and forecast winds for March 15, 2016 06Z with points representing cell concentration sampling data from March 4 to 9: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Texas Parks and Wildlife Department. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

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Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).